



Missouri Department of Natural Resources

What You Should Know Before You Build

A Buyer's and Developer's Guide to Environmental Regulations

Division of Environmental Quality fact sheet

6/2006

What you build and how you build it makes a difference. By adhering to environmental standards, you can help keep healthy air, clean drinking water, pure streams and lakes, and preserve the land for future generations.

What do you need?

Most new construction projects must meet a variety of requirements that are designed to protect public health and the environment. State environmental regulations administered by the Missouri Department of Natural Resources pertain to air pollution control, drinking water supplies, water pollution control, solid waste, hazardous waste, dam construction and well drilling.

Before you buy land, many lenders require an environmental assessment of the land. Knowing whether the property is polluted before it is purchased could avoid expensive cleanup costs. Environmental consulting firms can provide an assessment.

Before you build, you should find out if you need permits or other approvals from the department. By acquainting yourself with environmental requirements ahead of time, you can avoid costly modifications during or after construction. In addition, you can protect the environment and enhance your investment.

If you buy an existing structure, business or dam, you should check to see if you need an environmental approval from the department. Approvals may not automatically transfer from one property owner to the next. You may need to reapply.

If you decide to remodel or demolish an existing structure, you should check to see if you need "asbestos" approval from the department. You cannot tell asbestos by looking at it. Additional information can be found in the department's *Asbestos Requirements for Demolition and Renovation Projects* (PUB2157) fact sheet available on the Web at www.dnr.mo.gov/pubs/pub2157.pdf.

Do not bury or burn your demolition waste without contacting the department. Demolition debris cannot be burned unless the structure is being used for fire training. This will require a permit. Debris that may contaminate the soil/water cannot be buried. The *Managing Construction and Demolition Waste* (PUB2045) fact sheet explains this in more detail, available on the Web at www.dnr.mo.gov/pubs/pub2045.pdf.

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A few examples of facilities that might need permits are amusement parks, bars, restaurants, apartment complexes, campgrounds, churches, car washes, gas stations, grocery stores, dams, dry cleaners, condominiums, industry, hospitals, mobile home parks, retail shops, printers, single family residences and subdivisions.

Use the worksheet in this fact sheet to get a better idea of requirements your construction project or structure must meet.

Let us help you

If you need a permit or approval from the department, enough information must accompany your application for the department to determine that the proposed activity will comply with the law. In some instances, the information needed to support the application must be prepared by a registered professional engineer or geologist licensed to practice in Missouri.

Contact the department if you need assistance. Department employees will be glad to help you with information about Missouri's environmental laws and how they apply to your particular development project.

Once your application or request for approval is received, it is reviewed by the proper department staff. An appropriate permit or approval for the facility can be issued if the application and supporting information are in order, if any required public notice period has been observed and if the proposed activity will not violate environmental laws and regulations.

Additional department services

The department can provide many types of useful information for your project. Records on water quality, underground water supplies, land surveys, geologic data, soil properties and other information are available.

Where to get information

Missouri Department of Natural Resources
www.dnr.mo.gov

Kansas City Regional Office

500 N.E. Colbern Rd.
Lee's Summit, MO 64086-4710
(816) 622-7000

Northeast Regional Office

1709 Prospect Dr.
Macon, MO 63552-2602
(660) 385-8000

St. Louis Regional Office

7545 S. Lindbergh, Suite 210
St. Louis, MO 63125
(314) 416-2960

Southeast Regional Office
2155 North Westwood Blvd.
Poplar Bluff, MO 63901-1420
(573) 840-9750

Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
(417) 891-4300

State Historic Preservation Office

For information on possible historical preservation or cultural resources conflicts call
(573) 751-7858.

Division of Geology and Land Survey

For more information about land surveys, construction permits for new dams or registering existing dams contact:

Department of Natural Resources
Division of Geology and Land Survey
111 Fairgrounds Rd.
P.O. Box 250
Rolla, MO 65402
(573) 368-2100

Well Drilling

For information about well drilling (private, heat pump, mineral exploration or injection) and well driller permits contact:

Department of Natural Resources
Division of Environmental Quality
Wellhead Protection
P.O. Box 250
Rolla, MO 65402
(573) 368-2165

Other Resources

If the property you are developing or buying is located in a city or county with its own requirements (e.g., planning and zoning regulations) you may need to obtain some permits and approvals from the city or county in addition to those required by this department. In some instances, certain permits or approvals from local governments replace permits or approvals ordinarily obtained from the department. Check with city or county officials first. For example, in air pollution matters, the following local governments have authority to operate their own permit and variance programs:

Kansas City Air Pollution	(816) 513-6314
St. Louis City Air Pollution	(314) 613-7300
St. Louis County Dept. of Health	(314) 615-8924
Springfield Air Pollution	(417) 864-1662

Contact the U.S. Fish and Wildlife Service, (573) 876-1911, and the Missouri Department of Conservation, (573) 751-4115, to request a search for rare and endangered species in the project area.

The Department of Health and Senior Services regulates domestic waste water systems with a design capacity of less than 3,000 gallons per day and discharged to an approved soil absorption system, a holding tank or a lagoon serving a single-family residence. Call (573) 751-6095 or toll-free 1-866-628-9891.

The United States' Army Corps of Engineers needs to be contacted for

- Any work or structure in, over, or under a “navigable water of the United States” (this may include stormwater projects).
- Discharges of dredged material or fill into any “water of the United States”, including isolated waters and wetlands.

Kansas City District	(816) 983-3990
Little Rock District	(501) 324-5295
Memphis District	(901) 544-3471
Rock Island District	(309) 794-5370
St. Louis District	(314) 331-8574

Missouri Utilities Call Before You Dig 1-800-344-7483

Permits or Approvals That May Be Required

	Air Pollution ¹	Storm Water - Land Disturbances ²	Storm Water Industrial Operations ³	Wastewater ⁴	Water Wells ⁵	Hazardous Waste and Tanks	Drinking Water	Dams
Amusement Parks and Water Slide		X		X	X		Based on number of people/ connections	
Apartment Complex		X		X	X		X	
Bar or Lounge		X		X	X		X	
Campground				X	X		X	
Car Wash		X		X	X			
Condominium		X		X	X		X	
Dam		X		X				X
Dry Cleaners/ Laundromat	X	X		X	X	X		
Gas station	X	X		X	X	X	X	
Grocery Store		X		X	X		X	
Health Care Facility	X	X		X	X	X		
Industry	X	X	X	X	X	X	X	

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Mobile Home Park		X		X	X		X	
Motel		X		X	X		X	
Musical Theatre		X		X	X		X	
Printing or Photographic Business	X	X		X	X	X	X	
Restaurant/ Snack Shop/ Deli		X		X	X		X	
Resort		X		X	X		X	
Retail Shop/ Shopping Center		X		X	X		X	
Retirement Cemter	X	X		X	X			
Single Residence		X		X	X			
Subdivision		X		X	X		X	

1. An air pollution permit is required if an incinerator will be present, or if the open burning of construction wastes is planned. Gas stations in St. Louis City and St. Louis County also must get a local permit. Boilers over 10 MMBTU/hr and emergency generators may require a permit. Other air pollution emissions may also require a permit.
2. Runoff from land disturbances greater than one acre may require land disturbance storm water permits.
3. Runoff from certain activities may require storm water permits.
4. The department regulates domestic wastewater systems that discharge above ground or have design capacities of 3,000 gallons per day or more. They are also responsible for subdivisions with seven or more lots for sale, lease, or promotional plan. The department also regulates all non-domestic wastewater (e.g. cooling water, process wastewater, hospitals, etc.) no matter what the discharge rate is. Department of Health regulates domestic waste with a design capacity of less than 3,000 gallons per day and disposed of by an approved underground method, holding tank, or a lagoon serving a single family residence.
5. All public water wells and oil and gas well require a permit. Private domestic waters, multi-family wells, heat pump wells, monitoring wells and mineral exploration bores do not need a permit, but must be installed in accordance with the Missouri Well Construction Rules and reported on a certification form to the department's Public Drinking Water Branch - Wellhead Protection Section in Rolla within 60 days of installation.
6. Drinking water systems that regularly serve an average of 25 or more individuals at least 60 days out of the year or have 15 or more service connections have additional permitting, monitoring and reporting requirements.

* Note: The department should be contacted prior to construction of facilities to determine if a permit or approval is required. Some facilities not mentioned that will probably require permits and approvals are: POTW, landfills, power plants, transfer stations, hazardous waste TSDs, etc.

See the guidance document *Environmental Permits and How to Obtain Them* (PUB98) available on the Web at www.dnr.mo.gov/pubs/pub98.pdf.

For more information

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102
1-800-361-4827
(573) 751-9277 fax
www.dnr.mo.gov/env/index.html

Yes No

Worksheet

Drinking Water Supplies

- Will your water supply system provide water for human consumption to 15 or more services connections or dwelling units?
- Will your water supply system provide water to an average of 25 or more individuals daily at least 60 days out of the year? (Examples: employees, office tenants or customers)
- Will you be constructing water lines to connect your projects to an existing community water system?

Wastewater

- Will you be constructing sanitary sewer lines to connect your project to an existing community sewer system?
- If your development is industrial, will it produce large quantities of wastewater or concentrated wastes? (Pretreatment may be required.)
- Will wastewater or cooling water be produced or will wastewater or sludge from a business or public entity require disposal?
- If your project is residential, will it serve more than one family unit?
- Will your development offer to sell, lease or rent more than six lots in a subdivision?
- Will your project involve dredging, filling or any construction within or on the banks of a waterway or wetland?
- Will a groundwater heat pump injection/withdrawal system serving more than eight households be installed?

Stormwater

- Will your project disturb one acre or more of land?
- Is your development an industrial facility that will have items stored outside exposed to stormwater? (Some industries are required to submit a no-exposure certification.)
- Is your development a hazardous waste treatment, storage or disposal facility, landfill, land application site, open dump, recycling facility, steam electric power generation facility or domestic sewage and wastewater treatment facility with a design flow of 1 million gallons per day or more?

- Is your development a transportation or postal service project that will be involved in vehicle maintenance, equipment cleaning operations or airport deicing operations?

Solid Waste

- Will any of the following materials require disposal: municipal waste, demolition or construction wastes, large brush and wood wastes, water or wastewater treatment sludges, asbestos-containing material or cut, chipped or shredded tires? (A permit is not required, but these materials must be properly handled and disposed of in permitted solid waste disposal facility.)
- Will any of the following materials require disposal: regulated hazardous waste, radioactive materials, explosives, polychlorinated biphenyls (PCBs), bulk liquids, highly flammable or volatile substances, septic tank pumpings, major appliances, waste oil, lead-acid batteries, whole waste tires or yard waste? (These items are excluded from sanitary landfill disposal under most circumstances and require special approval or other treatment or disposal methods.)
- Has dumping or burying of waste already occurred on the property?
- Will your facility generate or store soiled medical dressings and bandages, used medical needles or similar wastes?

Hazardous Waste

- Will your facility generate, store or dispose of any wastes that are corrosive, ignitable, reactive or toxic?
- Will your facility generate, store or dispose of spent photographic or printing chemicals (including x-ray chemicals)?
- Will your facility generate, store or dispose of other spent chemicals such as those found in dry cleaning fluids, paint products, insecticides, herbicides, solvents or swimming pool products.
- Will any hazardous wastes be treated on the property?
- Will there be any underground storage tanks (USTs) on the property? (A permit is not required, but USTs must be registered.)
- Will your facility generate used oil? (A permit is not required, but regulations must be followed.)

Dam Safety and Wells

- Is your dam or will your dam be at least 35 feet in height?
- Are you drilling a public, commercial, private, heat pump, mineral exploration, injection or monitoring well?

SPCC – Spill Prevention Control and Countermeasure Plan

(Regulated by multiple agencies)

- Will there be any above ground tanks that store oil (petroleum, synthetic, animal, fish or vegetable)? Is the total volume of oil in tanks greater than or equal to 1,320 gallons?
- Will you have any underground tanks that have a capacity greater than 42,000 gallons and will not be covered by the UST regulations?
- Is there secondary containment around tanks?

Air

- Will the finished non-residential structure vent any particles or fumes to the atmosphere, aside from standard plumbing heating systems' vents, fireplaces, or residential wood stoves? Will your facility use large amounts of wood, coal, natural gas, LP gas, fuel oil or waste oil for fuel?
- Is your development an industrial project, such as a stone quarry, bulk petroleum facility, sawmill, grain elevator, asphalt plant, concrete plant, cotton gin, grain or feed handling operation or fertilizer blending facility?
- If your development is an industrial project, will solvents be used?
- Is your business a gas station located in the counties of Jackson, Clay, Platte, St. Charles, Franklin, Jefferson or St. Louis or the city of St. Louis?
- Will your project have an incinerator?
- Will you be burning brush and trees at the construction site in a non-residential area or a residential area in St. Charles, Franklin, Jefferson or St. Louis counties?
- Will the facility have a boiler rated over 10 MMBTU/hr or an emergency generator?
- Will large quantities of chemicals be stored on site?